

MARINE CHEMIST'S CERTIFICATE

SBA Shipyard, Inc.

JO 190

SURVEY REQUESTED BY

NMS No. 2600

Shell Oil

8/22/78

VESSEL

OWNER OR AGENT

DATE

Tank barge

JW Indicator

8:30 AM

TYPE VESSEL

TEST METHOD

TIME OF COMPLETION

SBA Yard

Asphalt

1043

LOCATION

LAST CARGO

CERTIFICATE NO.

Inspection and air tests show the following:

Shifting of vessel within shipyard permitted Yes ☒ No ☐

All cargo tanks (1 thru 4) -gas free, generally clean, some residue, have fire-watch with hard hose on standby, then safe for men and fire.

Forward add after rakes-clean and gas free over some water, safe for men and fire with water out and firewatch with hard hose on standby.

Wing double bottom tanks 1P and 2P gas free, considerable amount of asphalt, will burn with heat, safe for fire to remove asphalt with firewatch with hard hose on standby during hot work.

Remaining wing double bottom tanks (1S, 2S, 3 P&S and 4 P&S) -gas free, generally clean, some asphalt residue, some insulation, some water, safe for men and fire with firewatch with hard hose on standby during hot work.

Heating coils-air blown.

Cargo lines-opened.

AIR VENTILATION IN ALL WORKTANKS. THIS PRODUCT WILL BURN WITH HEAT, HOWEVER IT IS NOT AN EXPLOSIVE PRODUCT. EXTREME CAUTION SHOULD BE MAINTAINED DURING REPAIRS.

In the event of any physical or atmospheric changes affecting the gas-free condition of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned.

Qualifications

Transfer of ballast or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or release of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated.

Standard Safety Designations

SAFE FOR MEN. Means that in the compartment or space so designated: (a) The oxygen content of the atmosphere is at least 18.0 percent by volume; and that, (b) Toxic materials in the atmosphere are within permissible concentrations; and (c) In the judgment of the Marine Chemist, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

SAFE FOR FIRE. Means that in the compartment so designated: (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (b) In the judgment of the Marine Chemist, the residues are not capable of producing a higher concentration than permitted by 1-5.2 (a) under existing atmospheric conditions in the presence of fire and while maintained as directed on the Marine Chemist's Certificate; and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or, in the case of fuel tanks, have been treated as deemed necessary by the Marine Chemist.

SAFE FOR SHIPBREAKING. Means that the compartment so designated: (a) Shall meet the requirements of 1-5.1; and, (b) In the judgment of the Marine Chemist, the residual combustible materials designated are not capable of producing fire beyond the extinguishing capabilities of the equipment on hand; and, (c) All adjacent compartments or spaces shall meet the requirements of 1-5.2 (a).

Chemist's Endorsement

This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with the Standard For the Control of Gas Hazards on Vessels to Be Repaired, adopted by the National Fire Protection Association, and have found the condition of each to be in accordance with its assigned designation.

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed

Marine Chemist Cert. No.

The undersigned shipyard representative acknowledges receipt of this Certificate and understands the conditions and limitations under which it was issued.

Shipyard Representative

Title

Date

Time